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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,275	10/17/2001	Robert B. Haines	10013717-1	6376

7590 06/15/2005

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EXAMINER

MURPHY, DILLON J

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,275	HAINES, ROBERT B.	
	Examiner	Art Unit	
	Dillon J. Murphy	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>October 17, 2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

There are numerous errors regarding the incorrect numbering of parts in figures, and the specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Examples of the errors include:

The ink nozzle of a printing system is referred to as part #302, page 6, line 10, which is actually numbered #304 in Figure 3. The communication medium operatively coupling the host device to the imaging device is incorrectly numbered as part #614 on page 8, line 26, and again on page 9, line 5, which is numbered #615 in Figure 6. On page 10, line 22, a space is required in the word "stacks302" to read "stacks 302." The computer-executable instructions are referred to as #918 on page 14, line 5, which is labeled as part #915 in Figure 9. The image engine is referred to as #718 on page 14, line 13, which is labeled as part #715 in Figure 9. On page 15, lines 9-11, the block which comprises steps of configuring the image-forming operations to form an image on a sheet of print media is referred to as block #1012, which is labeled as block #1004 in Figure 10.

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, and 4-6 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Biegelsen et al. (US 6,335,084), hereafter referred to as Biegelsen.

Regarding claim 1, Biegelsen teaches a method for sensing data from a sheet of print media, the method comprising: sensing a media marking imprinted on the edge of a print media, the media marking comprising media parameter information that corresponds to the sheet of print media (Biegelsen, col 2, ln 7-12, edge has indicia arranged to form a code that identifies sheet characteristics, and code reader reads indicia), and retrieving the media parameter information from the media marking (Biegelsen, col 5, ln 9-12, code reader reads mark and determines media type).

Regarding claim 4, which depends from claim 1, Biegelsen teaches a method wherein after receiving the media parameter information, the method further comprises:

Configuring an imaging device based on the media parameter information to form an image on the sheet of print media (Biegelsen, col 6, ln 28-38, image recording parameter device reads media parameters and configures imaging device based on the type of image recording media being used).

Regarding claim 5, which depends from claim 1, Biegelsen teaches a method wherein after receiving the media parameter information, the method further comprises:

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Determining whether to pull the sheet of print media from a particular media supply bin based on the media parameter information (Biegelsen, col 6, ln 7-27, in image recording apparatus #210 of figure 10, four different trays are loaded with four different types of media: transparencies, company letterhead, standard paper with a three-hole pattern, and cardstock. Upon print request, imaging device determines type of image recording media is in each tray and prints without having to manually change types of recording media or perform any manual collation).

Regarding claim 6, which depends from claim 1, Biegelsen teaches a method wherein after receiving the media parameter information, the method further comprises:

Determining if an appropriate print media is available in an imaging device to perform a particular imaging job based on the media parameter information (Biegelsen, col 5, ln 9-17, device determines whether image recording media in tray is identified as the selected type of image recording media. If identified media is correct type, media is pulled from tray and image is formed on the recording media).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 10-13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biegelsen et al. (US 6,335,084) and Ueda et al. (US 5,801,722), hereafter referred to as Biegelsen and Ueda.

Regarding claim 7, Biegelsen teaches steps of sensing marking material on the edge of a sheet of print media, wherein the media marking comprises media parameter information that corresponds to the sheet of print media (Biegelsen, col 2, ln 7-12, edge has indicia arranged to form a code that identifies sheet characteristics, and code reader reads indicia). Biegelsen also teaches steps of retrieving the media parameter information from the media marking (Biegelsen, col 5, ln 9-12, code reader reads mark and determines media type). The Biegelsen reference does not disclose expressly a computer-readable medium comprising computer-executable instructions for sensing data from a sheet of print media, nor does the Biegelsen reference disclose the instructions for imprinting a marking on the face of a sheet of print media. However, Ueda teaches a computer-readable medium comprising computer-executable instructions (Ueda, Figure 7, Non-volatile RAM #12 comprises Resolution Memory #12a and Paper Characteristic Memory #14a, coupled with CPU #11 and Recording Paper Characteristic Detector #16 for sensing media parameters and acting appropriately. Storing printer parameters by CPU #11 in RAM #12 is indicative of computer-executable instructions, especially when connected with an external CPU #50 in an external device such as a personal computer, col 4, ln 35-37), as well as instructions for imprinting on the face of the sheet media a media marking which corresponds to media parameter information (Ueda, col 8, ln 48-58, face of paper may be printed with a mark, e.g. a

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barcode or invisible mark, to correspond to media parameters. Examples of parameters are given in col 8, ln 8-21. Figure 6, photosensor oriented perpendicular to transport path #6, therefore mark is on face of media).

Biegelsen and Ueda are combinable because they are from the same field of endeavor of encoding media parameters on a sheet of print media and configuring the print device based upon the sensed parameters. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the computer-readable medium comprising computer-executable instructions for imprinting and sensing the mark on the face of a sheet of media of Ueda with the methods of Biegelsen comprising imprinting a mark on the edge of paper corresponding to media parameters, sensing the media marking, and retrieving the media parameters. The motivation for doing so would have been to provide redundant means to identify each sheet as being a particular type of image recording media (Biegelsen, col 4, ln 63-65). By identifying the correct media type, an imaging method is provided which can produce high quality image onto any kinds of recording papers and which can save time, paper, and ink (Ueda, col 2, ln 24-28). Therefore, it would have been obvious to combine Ueda with Biegelsen to obtain the invention as specified in claim 1.

Regarding claim 10, which depends from claim 7, the combination further teaches a computer-readable medium wherein after the instructions for receiving the media parameter information, the computer-executable instructions further comprise instructions for:

Configuring an imaging device based on the media parameter information to form an image on the sheet of print media (Biegelsen, col 6, ln 28-38, image recording parameter device reads media parameters and configures imaging device based on the type of image recording media being used).

Regarding claim 11, which depends from claim 7, the combination further teaches a computer-readable medium wherein after the instructions for receiving the media parameter information, the computer-executable instructions further comprise instructions for:

Determining whether to pull the sheet of print media from a particular one bin of a plurality of media supply bins based on the media parameter information (Biegelsen, col 6, ln 7-27, in image recording apparatus #210 of figure 10, four different trays are loaded with four different types of media: transparencies, company letterhead, standard paper with a three-hole pattern, and cardstock. Upon print request, imaging device determines type of image recording media is in each tray and prints without having to manually change types of recording media or perform any manual collation).

Regarding claim 12, which depends from claim 7, the combination further teaches a computer-readable medium wherein after the instructions for receiving the media parameter information, the computer-executable instructions further comprise instructions for:

Determining if an appropriate print media is available in an imaging device to perform a particular imaging job based on the media parameter information (Biegelsen, col 5, ln 9-17, device determines whether image recording media in tray is identified as

the selected type of image recording media. If identified media is correct type, media is pulled from tray and image is formed on the recording media).

Regarding claim 13, the combination further teaches an imaging device (Biegelsen, Figure 8, #110 image recording apparatus illustrated as a photocopier, but can also be a printer, a facsimile machine, and offset print press, col 4, ln 54-59, and Ueda, figure 7, #1, printer) comprising:

A memory comprising computer-executable instructions for sensing data from a sheet of print media, the device, and

A processor that is operatively coupled to the memory (Ueda, Figure 7, Non-volatile RAM #12 comprises Resolution Memory #12a and Paper Characteristic Memory #14a, coupled with CPU #11 and Recording Paper Characteristic Detector #16 for sensing media parameters and acting appropriately. Storing printer parameters by CPU #11 in RAM #12 is indicative of computer-executable instructions, especially when connected with an external CPU #50 in an external device such as a personal computer, col 4, ln 35-37), the processor being configured to fetch and execute the computer-executable instructions from the memory, the computer-executable instructions comprising instructions for:

Independent of whether a media marking is imprinted on an edge (Biegelsen, col 2, ln 7-12, edge has indicia arranged to form a code that identifies sheet characteristics, and code reader senses indicia) or a face (Ueda, col 8, ln 48-58, face of paper may be printed with a mark, e.g. a barcode or invisible mark, to correspond to media parameters) of a sheet of print media, sensing the media marking, the media marking

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comprising media parameter information that corresponds to the sheet of print media;
and

Retrieving the media parameter information from the media marking (Biegelsen, col 5, ln 9-12, code reader reads mark and determines media type).

Regarding claim 16, which depends from claim 13, the combination further teaches an imaging device, wherein after the instructions for receiving the media parameter information, the computer-executable instructions further comprise instructions for:

Configuring an imaging device based on the media parameter information to form an image on the sheet of print media (Biegelsen, col 6, ln 28-38, after image recording parameter device reads media parameters, instructions are given by processor to configure imaging device based on the type of image recording media being used).

Regarding claim 17, which depends from claim 13, the combination further teaches an imaging device, wherein after the instructions for receiving the media parameter information, the computer-executable instructions further comprise instructions for:

Determining whether to pull the sheet of print media from a particular one bin of a plurality of media supply bins based on the media parameter information (Biegelsen, col 6, ln 7-27, in image recording apparatus #210 of figure 10, four different trays are loaded with four different types of media: transparencies, company letterhead, standard paper with a three-hole pattern, and cardstock. Upon print request, imaging device

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determines type of image recording media is in each tray and prints without having to manually change types of recording media or perform any manual collation).

Regarding claim 18, which depends from claim 13, the combination further teaches an imaging device, wherein after the instructions for receiving the media parameter information, the computer-executable instructions further comprise instructions for:

Determining if an appropriate print media is available in an imaging device to perform a particular imaging job based on the media parameter information (Biegelsen, col 5, ln 9-17, device determines whether image recording media in tray is identified as the selected type of image recording media. If identified media is correct type, media is pulled from tray and image is formed on the recording media).

Claims 2, 3, 8, 9, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Biegelsen et al. (US 6,335,084) and Ueda et al. (US 5,801,722) as applied to claim 1 above, and further in view of Meunier et al. (US 6,582,138), hereafter referred to as Biegelsen, Ueda, and Meunier.

Regarding claim 2, which depends from claim 1, the combination of Biegelsen and Ueda teach a method of imprinting a mark on a face or edge of a sheet of media with the mark corresponding to parameters of said media. Additionally, the combination teaches the sensing of the mark, and retrieving media parameter information, as explained above. Although the combination of Biegelsen and Ueda uses media marks such as barcodes (Biegelsen, col 3, ln 54-62, media mark is bar code, visible or invisible, with invisible mark formed using invisible ink such as a fluorescent ink), the

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combination does not disclose expressly wherein the mark is an ink-bled media marking. Meunier discloses a visible ink-bled media mark on the edge of the media sheet used for encoding media parameters and identifying the document (Meunier, col 3, ln 3 and 4, also see figure 1, #12, edge marking is a barcode). Additionally, the media parameter information (Meunier, col 12, ln 40-43, ink penetration measurements may be stored) may be printed on any surface of the paper, including the face (Meunier, col 13, ln 20-25).

Biegelsen, Ueda, and Meunier are combinable because they are from the same field of endeavor of managing sheet material having information recorded thereon. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the explicit ink-bled media marking of Meunier in combination with the previously taught media marking, sensing and retrieving system of Biegelsen and Ueda. The suggestion for doing so would be to facilitate the marking process by printing on the face of the paper and allowing the ink to bleed through to the edge (Meunier, col 12, ln 10-12). Therefore, it would have been obvious to combine Meunier with the aforementioned combination of Biegelsen and Ueda to obtain the invention as specified in claim 2.

Regarding claim 3, which depends from claim 1, the combination further teaches a method wherein the media marking is an ink-bled media marking mark. The mark of Meunier is formed through the bleeding of ink (Meunier, col 12, ln 10-12), thus the mark as taught by Meunier is an ink-bled media marking mark.

Regarding claim 8, which depends from claim 7, the combination further teaches a computer-readable medium comprising computer-executable instructions (Ueda, Figure 7, Non-volatile RAM #12 comprises Resolution Memory #12a and Paper Characteristic Memory #14a, coupled with CPU #11 and Recording Paper Characteristic Detector #16 for sensing media parameters and acting appropriately. Storing printer parameters by CPU #11 in RAM #12 is indicative of computer-executable instructions, especially when connected with an external CPU #50 in an external device such as a personal computer, col 4, ln 35-37) wherein the media marking is an ink-bled media marking (Meunier, col 3, ln 3 and 4, also see figure 1, #12, edge marking is a barcode).

Regarding claim 9, which depends from claim 7, the combination teaches a computer-readable medium wherein the media marking is an ink-bled media marking mark (the mark of Meunier is formed through the bleeding of ink, col 12, ln 10-12, thus the mark as taught by Meunier is an ink-bled media marking mark).

Regarding claim 14, which depends from claim 13, the combination further teaches an imaging device (Biegelsen, Figure 8, #110 image recording apparatus illustrated as a photocopier, but can also be a printer, a facsimile machine, and offset print press, col 4, ln 54-59, and Ueda, figure 7, #1, printer) wherein the media marking is an ink-bled media marking (Meunier, col 3, ln 3 and 4, also see figure 1, #12, edge marking is a barcode).

Regarding claim 15, which depends from claim 13, the combination further teaches an imaging device wherein the media marking is an ink-bled media marking

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mark (the mark of Meunier is formed through the bleeding of ink, col 12, ln 10-12, thus the mark as taught by Meunier is an ink-bled media marking mark).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Higuchi, U.S Patent Number 6,283,653, filed November 3, 1998, is cited for teaching a print apparatus and method for determining print mode and medium, and selecting a paper feeder for designated print mode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon J. Murphy whose telephone number is (571) 272-5945. The examiner can normally be reached on M-F, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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